

REMARKS

Reconsideration of the issues raised in the above referenced Office Action is respectfully solicited.

Applicants appreciate the indication of allowable subject matter in Claims 5, 10, 13, 14, 18-20 and 23.

Independent Claim 1 has been amended to incorporate the features of allowed dependent Claims 4 and 5 and thus is now allowable over the applied prior art. Therefore, allowance of independent Claim 1, and Claims 2, 3 and 16 dependent therefrom, is respectfully requested.

Independent Claim 9 has been amended to include the features of allowed Claim 14. Therefore, allowance of independent Claim 9, and Claim 10 dependent therefrom, is respectfully requested.

Dependent Claims 18 and 19, which were indicated as being allowable, have been rewritten in independent form including the features of parent Claim 9. Therefore, allowance of Claims 18 and 19 is respectfully requested.

Independent Claim 11 has been amended to include the features of allowed dependent Claim 20. Therefore, allowance of Claim 11, and Claims 12 and 13 dependent therefrom, is respectfully requested.

The rejection of Claims 21, 22 and 24-26 under 35 USC §103 as being unpatentable over Roberto, U.S. Patent No. 5 562 581 in view of Dietrich, U.S. Patent No. 4 197 790 and further in view of Mondani, U.S. Patent No. 5 715 657 has been considered.

Roberto discloses a device for withdrawing and opening cases made of sheet material to feed to a packaging line. The device has a rotating member with suction cups mounted on shafts that oscillate as the cases or boxes are opened.

Dietrich discloses a method and apparatus for opening and handling folded boxes that includes a single transport arm 9 with suction devices 3 that receives a folded box or carton 2 and advances the box or carton into contact with a rail 5 to fully open the box. The fully opened box 2 is received on a

conveyor 6 and advanced by transport stakes 7, 8. The transport arm 9 then reverses its direction to receive another folded box. Dietrich does not disclose transporting a "partially" opened box or utilizing a plurality of arms rotating in a "single" direction.

Mondani discloses a method of expanding and feeding cartons to a filling line that utilizes an article handling device having multiple gripping units 25 with suction cups 55 that grip and unfold cartons 4 prior to placement on a conveyor 10.

There is no motivation, absent Applicants' specification, to selectively utilize elements from Dietrich and Mondani to modify the device of Roberto in an attempt to form Applicants' claimed invention.

More specifically, the single arm apparatus of Dietrich which fully opens boxes that are then placed on a conveyor is utilized in the Office Action for the teaching of a compressing section 5 with a curved surface for opening a carton. The Dietrich device fully opens the carton. Furthermore, Dietrich only discloses a single arm that moves in two directions. This arrangement differs greatly from the devices of Roberto and Mondani which both include a plurality of rotating arms with grippers.

Since the device of Dietrich has a completely different type of transfer arm and utilizes the curved surface to fully open boxes, there is no motivation, absent Applicants' specification, to provide the curved surface of Dietrich for the apparatus of Roberto and Mondani.

Furthermore, the curved surface of Dietrich completely opens the carton and thus does not perform partial unfolding as recited in Applicants' Claim 21.

Therefore, if Dietrich were combined with Roberto, which Applicants disagree with, Applicants' claimed invention would not result.

Independent Claim 21 has been amended to recite that the folded box sleeve is moved along "a curve of the cycloidal

path" and that "the curved sliding surface is adapted to the curvature and distance of the cycloidal path in order to achieve the compression and thus the partial erection of the folding-box sleeve". These features are present in Applicants' allowed Claim 14 and are believed to further distinguish the applied prior art.

Claim 22 recites a removal device with drivers having a driving surface that "corresponds with respect to its orientation to the orientation of a sidewall of the partially erected folding-box sleeve". The removal device is "for removing the folding-box sleeves from the duct".

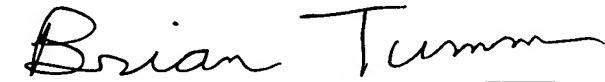
The rejection discloses no element in the applied prior art that corresponds to the removal device. Instead the rejection relies on suction cups 23, support bar 25 and crank 26 of Roberto. These elements do not receive a partially erected folding-box from a duct following a compression section. Instead these elements of Roberto discussed in the Office Action receive a flat box from a magazine.

For the above reasons, reconsideration and allowance of Claims 21, 22 and 24-26 is respectfully requested.

Dependent Claim 23 remains allowable.

Further and favorable reconsideration is respectfully solicited.

Respectfully submitted,

  
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